Report of the CGGTTS

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Summary

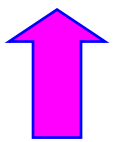
- Technical Directives for Reporting Time transfer data
- Studies to improve uncertainties at each laboratory
- Reduce track length
- Future work

Current Reporting Format

```
PRN_CL__MJD__STTIME …
_____________hhmmss
_xx_xx_xxxxx_xxxxxx …
```

Proposal 1 Reporting Format

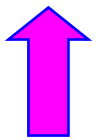
```
PRN_CL__MJD__STTIME …
_____________hhmmss
nxx_xx_xxxxx_xxxxxx …
```



Digit to identify satellite system
Solution not compatible with numbering

Proposal 2 Reporting Format

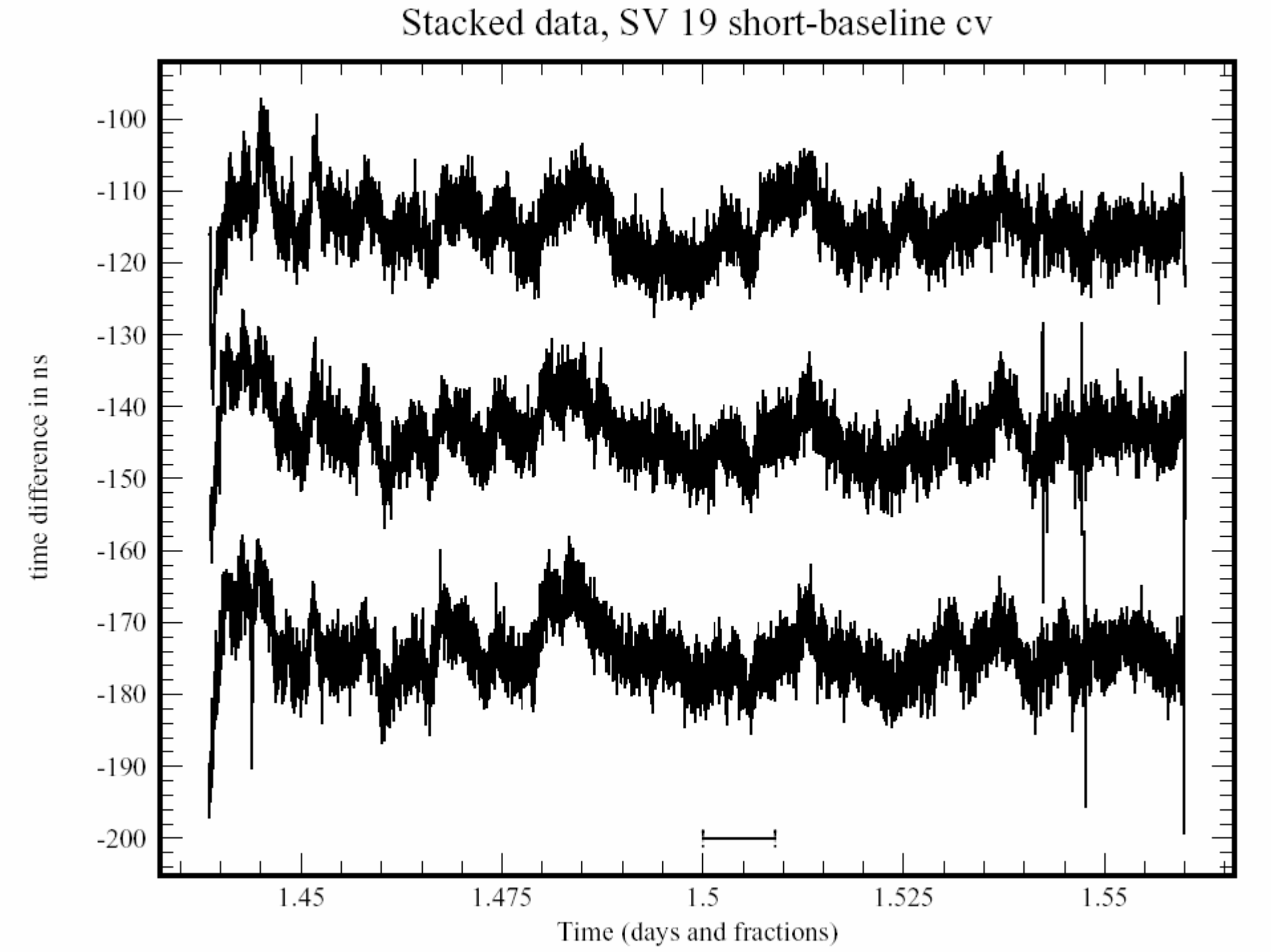
```
PRN_CL__MJD__STTIME …
_____________hhmmss
_xxTxx_xxxxx_xxxxxx …
```



Single letter:

- G or blank = GPS
- R = GLONASS
- E = Galileo

Follow IGS conventions (sp3c.txt)


Stacked data, SV 19 short-baseline cv
time difference in ns
-100
-110
-120
-130
-140
-150
-160
-170
-180
-190
-200
1.45
1.475
1.5
1.525
1.55
Time (days and fractions)

Receiver calibrations

- Short-baseline common view affected by multi-path
  - Changes receiver "calibration"
  - Track length and 4 minute advance make problem hard to see

New Tracking method

- Reduce track length to 15 s or 30 s
  - 15 s compatible with existing method
  - Compatible with geodetic receivers
- Simplify averaging method
  - Complicated averaging no longer needed

How much data?

- Receiver outputs 60,000 bytes/day
  - About 1 minute even at 9600 baud
- Output of 50 receivers: 3MB/day
  - 30 GB disk holds 10,000 days of data

Future Work

- Replace standing CGGTTS committee with short-term working groups to study specific questions
  - Working groups should have specific members and terms of reference